

IN THE CLAIMS:

Kindly amend the claims as follows:

1-129. (Cancelled)

130. (Currently Amended) A personal computer, comprising:

a microchip, the microchip comprising:

at least ~~two~~ four microprocessors, exclusive of a digital signal processor (DSP),

a non-volatile memory component, and

a power management component[;], and

at least one internal firewall with a hardware component, the internal firewall capable of allowing and/or denying access to portions of the microchip both to at least one user of the personal computer and to at least one user of the microchip from the network during shared use of the microchip; and

a wireless network connection mechanism configured to connect the personal computer to a network, the network comprising[,] ~~an~~ the Internet.

131. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the wireless network connection mechanism is ~~substantially~~ located on the microchip.

132. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the network comprises ~~a~~ the World Wide Web.

133. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the personal computer comprises only one microchip.

134. (Currently Amended) The personal computer of claim ~~136~~ 137, wherein the second personal computer is idled by a personal user.

135. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the microchip comprises at least four microprocessors, exclusive of the digital signal processor (DSP) the internal firewall is non-configurable hardware.

136. (Currently Amended) The personal computer of claim ~~135~~ 137, wherein the personal computer is configured to function in a shared operation comprising at least the personal computer and a second computer connected to the network; ~~and the shared services operation involves compensation.~~

137. (Currently Amended) The personal computer of claim ~~136~~ 139, wherein the ~~compensation is financial~~ internal firewall is a hardware firewall.

138. (Currently Amended) The personal computer of claim ~~136~~ 137, wherein the shared operation comprises shared file resources and/or message passing.

139. (Currently Amended) The personal computer of claim ~~136~~ 130, wherein ~~the shared operation comprises parallel processing~~ the shared use includes unauthorized shared use, such as intrusion by hackers from outside the personal computer.

140. (Currently Amended) The personal computer of claim ~~136~~ 137, wherein the shared operation comprises multi-tasking or parallel processing.

141. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the microchip comprises a digital signal processor (DSP).

142. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein a random access memory (RAM) located on the microchip comprises a non-cache memory.

143. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the microchip comprises at least 8 microprocessors, exclusive of the digital signal processor (DSP).

144. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the wireless network connection mechanism is configured to process a wireless signal that is dense wave division multiplexed (DWDM).

145. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the network comprises a network server computer.

146. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the network comprises an Intranet.

147. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the ~~microchip comprises a~~ internal firewall includes a firmware component.

148. (Currently Amended) The personal computer of claim ~~147~~ 137, wherein ~~the firewall is configured to protect a single microprocessor~~ the internal firewall is configured to deny access to at least a first microchip microprocessor of the personal computer by at least one other computer during a shared operation involving the personal computer and the at least one other computer of the network.

149. (Currently Amended) The personal computer of claim 148, wherein ~~firewall denies all access to the microprocessor by the network~~ the internal firewall is further configured to allow access to at least a second microchip microprocessor of the at least one personal computer by at least one of the other computers of the network during the shared operation.

150. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the personal computer is intended for personal use by at least one of an individual owner and a leaser of the personal computer.

151. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the personal computer comprises a connection from the personal computer to the network, the connection having a speed of data transmission that is greater than a peak data processing speed of the personal computer.

152. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the personal computer is controlled by a user of the personal computer through a wireless controller operated by the user.

153. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the microchip comprises at least 16 microprocessors, exclusive of the digital signal processor (DSP).

154. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the microchip provides a graphics function.

155. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the microchip comprises a modem component.

156. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the microchip provides a sound function.

157. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the microchip comprises a video function.

158. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the microchip comprises a magnetic memory component.

159. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the microchip comprises a BIOS (basic input/output system) component.

160. (Previously Presented) The personal computer of claim 159, wherein the BIOS component is located on a flash memory component.

161. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the microchip comprises at least part of a system bus component.

162. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the microchip comprises a transponder.

163. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the personal computer comprises: a handheld personal digital assistant, a wearable computer, a television, a digital set-top control box, a video game, a videocam, a compact disc (CD) or a digital video disk (DVD) player/recorder, a radio, a camera, a household electronic device, or a business electronic device, or any combination thereof.

164. (Currently Amended) The personal computer of claim ~~163~~ 137, wherein the microchip comprises at least 32 microprocessors, exclusive of the digital signal processor (DSP).

165. (Currently Amended) The personal computer of claim ~~163~~ 137, wherein the microchip comprises at least 64 microprocessors, exclusive of the digital signal processor (DSP).

166. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the microchip comprises an analog computer.

167. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein a system bus of the microchip comprises a hierarchical connection architecture between at least some of the microprocessors.

168. (Previously Presented) The personal computer of claim 167, wherein the system bus comprises a binary tree network architecture between at least some of the microprocessors.

169. (Currently Amended) The personal computer of claim ~~167~~ 137, wherein the microchip comprises at least 128 microprocessors, exclusive of the digital signal processor (DSP).

170. (Currently Amended) The personal computer of claim ~~169~~ 137, wherein the microchip comprises at least 256 microprocessors, exclusive of the digital signal processor (DSP).

171. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the personal computer comprises a direct optical fiber connection to the microchip.

172. (Currently Amended) The personal computer of claim ~~170~~ 169, wherein at least some of the microprocessors have a non-superscalar architecture.

173. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the microchip is connected to a hard disk drive controlled by the microchip.

174. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the microchip comprises an micro electromechanical (MEMS) component.

175. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the microchip comprises active configuration of an integrated circuit of the microchip.

176. (Previously Presented) The personal computer of claim 175, wherein the microchip comprises a field-programmable gate array.

177. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the microchip comprises at least 512 microprocessors, exclusive of a digital signal processor (DSP).

178. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the microchip comprises a hardware encryption component ~~which substantially provides an encryption function of the personal computer.~~

179. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the personal computer comprises an encryption microchip.

180. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the personal computer comprises a telephone.

181. (Currently Amended) The personal computer of claim ~~180~~ 149, wherein ~~the second computer is a personal computer~~ the internal firewall is configured to deny access to at least the first microchip microprocessor of the personal computer by the other computers of the network during a shared operation involving the personal computer and at least one of the other computers of the network.

182. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the non-volatile memory component comprises a flash memory component.

183. (Currently Amended) The personal computer of claim ~~182~~ 149, wherein ~~the personal computer is substantially contained on the microchip, the microchip comprising a system on a chip~~ the internal firewall is configured to allow access to at least the second microchip microprocessor processing unit of the personal computer by the other computers of the network during the shared operation.

184. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the microchip comprises at least 1024 microprocessors, exclusive of a ~~said~~ the digital signal processor (DSP).

185. (Previously Presented) The personal computer of claim 184, wherein at least two of the microprocessors are used for parallel processing or multi-tasking.

186. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the personal communications device comprises a pager.

187. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the personal computer is mobile.

188. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the microchip comprises a television function.

189. (Currently Amended) The personal computer of claim ~~136~~ 137, wherein the wireless network connection mechanism is configured to make a direct wireless connection to the second personal computer, the direct wireless connection being made without a network server or router.

190. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the personal computer is configured for a substantially continuous wireless network connection.

191. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the personal computer comprises an optical fiber network connection mechanism configured to

connect the personal computer to the network and to process a fiber optic signal that is wave division multiplexed.

192. (Previously Presented) The personal computer of claim 191, wherein the optical fiber network connection mechanism is configured to process a fiber optic signal that is wave division multiplexed.

193. (Currently Amended) The personal computer of claim ~~130~~ 183, ~~wherein the personal computer comprises a firewall. the internal firewall is configured to deny access to at least the second microchip microprocessor processing unit of the personal computer by at least one user of the personal computer during the shared operation~~

194. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the personal computer comprises an automobile, a transportation device, or a robot, or any combination thereof.

195. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the microchip comprises an application-specific integrated circuit (ASIC).

196. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the ~~microchip comprises a~~ internal hardware firewall is configured to deny all network access to at least a portion of the non-volatile memory component.

197. (Currently Amended) The personal computer of claim ~~130~~ 137, wherein the microchip comprises at least two or four digital signal processors (DSPs).

198. (Currently Amended) A personal computer, comprising:
a microchip, the microchip comprising:
at least ~~two or four or 8 or 16 or 32 or 64 or 128 or 256 or 512 or 1024~~
microprocessors, exclusive of a digital signal processor (DSP),
a power management component,
at least one internal firewall, the internal firewall being a hardware firewall capable of allowing and/or denying access to portions of the microchip both to at least one user of the personal computer and to at least one user of the microchip from the network during shared use of the microchip; and
a wireless network connection mechanism configured to connect the personal computer to a network, the network comprising ~~an~~ the Internet.

199. (Currently Amended) The personal computer of claim 198, wherein ~~the microchip comprises an encryption component~~ the internal firewall is configured to deny access to at least a first microchip microprocessor of the personal computer by at least one other computer during a shared operation involving the personal computer and the at least one other computer of the network, and
the internal firewall is further configured to allow access to at least a second microchip microprocessor of the at least one personal computer by at least one of the other computers of the network during the shared operation;

wherein the shared use includes unauthorized shared use, such as intrusion by hackers from outside the personal computer.

200. (Currently Amended) The personal computer of claim ~~198~~ 199, wherein ~~a non-volatile memory component and a firewall hardware component are substantially located on the microchip~~ the internal firewall is configured to deny access to at least the first microchip microprocessor of the personal computer by the other computers of the network during a shared operation involving the personal computer and at least one of the other computers of the network; and

wherein the shared operation comprises shared file resources and/or message passing.

201. (Currently Amended) A personal computer, comprising:

a microchip, the microchip comprising:

~~at least two or four or 8 or 16 or 32 or 64 or 128 or 256 or 512 or 1024~~

~~microprocessors~~, exclusive of a digital signal processor (DSP),

an analog communications component, ~~and~~

a power management component, and

at least one internal firewall, the internal firewall being a hardware firewall capable of allowing and/or denying access to portions of the microchip both to at least one user of the personal computer and to at least one user of the microchip from the network during shared use of the microchip; and

a wireless network connection mechanism configured to connect the personal computer to the network, the network comprising:

an the Internet.

202. (Currently Amended) The personal computer of claim 201, wherein ~~the microchip comprises an encryption component~~ the internal firewall is configured to deny access to at least a first microchip microprocessor of the personal computer by at least one other computer during a shared operation involving the personal computer and the at least one other computer of the network, and

the internal firewall is further configured to allow access to at least a second microchip microprocessor of the at least one personal computer by at least one of the other computers of the network during the shared operation;

wherein the shared use includes unauthorized shared use, such as intrusion by hackers from outside the personal computer .

203. (Currently Amended) The personal computer of claim ~~201~~ 202, wherein the ~~wireless network connection mechanism, a non-volatile memory component and a firewall hardware component are substantially located on the microchip~~ the internal firewall is configured to deny access to at least the first microchip microprocessor of the personal computer by the other computers of the network during a shared operation involving the personal computer and at least one of the other computers of the network;

wherein the shared operation comprises shared file resources and/or message passing.

204. (Currently Amended) A personal computer comprising:

a microchip, the microchip comprising:

at least ~~two or four or 8 or 16 or 32 or 64 or 128 or 256 or 512 or 1024~~
microprocessors, exclusive of a digital signal processor (DSP);
a digital signal processor (DSP); and
a power management component; and
at least one internal firewall, the internal firewall being a hardware firewall capable
of allowing and/or denying access to portions of the microchip both to at least one user of the
personal computer and to at least one user of the microchip from the network during shared use of
the microchip; and
a wireless network connection mechanism configured to connect the personal
computer to a network, the network comprising:
an the Internet.

205. (Currently Amended) The personal computer of claim 204, wherein ~~the microchip
comprises an encryption component~~ the internal firewall is configured to deny access to at least a
first microchip microprocessor of the personal computer by at least one other computer during a
shared operation involving the personal computer and the at least one other computer of the
network, and

the internal firewall is further configured to allow access to at least a second microchip
microprocessor of the at least one personal computer by at least one of the other computers of the
network during the shared operation;

wherein the shared use includes unauthorized shared use, such as intrusion by hackers
from outside the personal computer.

206. (Currently Amended) The personal computer of claim ~~204~~ 205, wherein the ~~wireless network connection mechanism, a flash memory component and a firewall hardware component are substantially located on the microchip~~ the internal firewall is configured to deny access to at least the first microchip microprocessor of the personal computer by the other computers of the network during a shared operation involving the personal computer and at least one of the other computers of the network; and
wherein the shared operation comprises shared file resources and/or message passing.

207. (Currently Amended) A personal computer, comprising:
a microchip, the microchip comprising:
 ~~at least two or four or 8 or 16 or 32 or 64 or 128 or 256 or 512 or 1024~~
microprocessors, exclusive of a digital signal processor (DSP),
 an active configuration of an integrated circuit of the microchip, and
 a power management component function of said ~~the~~ personal computer[;], and
 at least one internal firewall, the internal firewall being a hardware firewall capable of allowing and/or denying access to portions of the microchip both to at least one user of the personal computer and to at least one user of the microchip from the network during shared use of the microchip; and
a wireless network connection mechanism configured to connect the personal computer to a network, the network comprising:
 an Internet.

208. (Currently Amended) The personal computer of claim 207, wherein ~~the microchip comprises an encryption component~~ the internal firewall is configured to deny access to at least a first microchip microprocessor of the personal computer by at least one other computer during a shared operation involving the personal computer and the at least one other computer of the network, and

the internal firewall is further configured to allow access to at least a second microchip microprocessor of the at least one personal computer by at least one of the other computers of the network during the shared operation;

wherein the shared use includes unauthorized shared use, such as intrusion by hackers from outside the personal computer.

209. (Currently Amended) The personal computer of claim ~~207~~ 208, wherein the ~~wireless network connection mechanism, a flash memory component and a firewall hardware component are substantially located on the microchip~~ the internal firewall is configured to deny access to at least the first microchip microprocessor of the personal computer by the other computers of the network during a shared operation involving the personal computer and at least one of the other computers of the network; and

wherein the shared operation comprises shared file resources and/or message passing.

210. (Currently Amended) A personal computer, comprising:

a microchip, the microchip comprising:

at least ~~two or four or 8 or 16 or 32 or 64 or 128 or 256 or 512 or 1024~~

microprocessors, exclusive of a digital signal processor (DSP),

a field-programmable gate array (FPGA), and
a power management component[;], and
at least one internal firewall, the internal firewall being a hardware firewall capable of allowing and/or denying access to portions of the microchip both to at least one user of the personal computer and to at least one user of the microchip from the network during shared use of the microchip; and

a wireless network connection mechanism configured to connect the personal computer to the network, the network comprising:

an the Internet.

211. (Currently Amended) The personal computer of claim 210, wherein ~~the microchip comprises an encryption component~~ the internal firewall is configured to deny access to at least a first microchip microprocessor of the personal computer by at least one other computer during a shared operation involving the personal computer and the at least one other computer of the network, and

the internal firewall is further configured to allow access to at least a second microchip microprocessor of the at least one personal computer by at least one of the other computers of the network during the shared operation;

wherein the shared use includes unauthorized shared use, such as intrusion by hackers from outside the personal computer.

212. (Currently Amended) The personal computer of claim ~~210~~ 211, wherein ~~the wireless network connection mechanism, a flash memory component and a firewall hardware~~

~~component are substantially located on the microchip~~ the internal firewall is configured to deny access to at least the first microchip microprocessor of the personal computer by the other computers of the network during a shared operation involving the personal computer and at least one of the other computers of the network; and

wherein the shared operation comprises shared file resources and/or message passing.

213. (Currently Amended) A personal computer, comprising:

a microchip, the microchip comprising:

at least ~~two or four or 8 or 16 or 32 or 64 or 128 or 256 or 512 or 1024~~

microprocessors, exclusive of a digital signal processor (DSP),

a power management component; and

at least one internal firewall, the internal firewall being a hardware firewall capable of allowing and/or denying access to portions of the microchip both to at least one user of the personal computer and to at least one user of the microchip from the network during shared use of the microchip; and

a wireless network connection mechanism configured to connect the personal computer to the network, the network comprising:

~~an~~ the Internet,

the wireless network connection mechanism comprising a capability to make a wireless connection to a second personal computer through at least one wireless link, and

the wireless connection being made without a network server or router.

214. (Currently Amended) The personal computer of claim 213, wherein ~~the microchip comprises an encryption component~~ the internal firewall is configured to deny access to at least a first microchip microprocessor of the personal computer by at least one other computer during a shared operation involving the personal computer and the at least one other computer of the network, and

the internal firewall is further configured to allow access to at least a second microchip microprocessor of the at least one personal computer by at least one of the other computers of the network during the shared operation;

wherein the shared use includes unauthorized shared use, such as intrusion by hackers from outside the personal computer.

215. (Previously Presented) The personal computer of claim 213, wherein the wireless network connection mechanism makes the wireless connection directly to the second personal computer through only one wireless link.

216. (Previously Presented) The personal computer of claim 213, wherein the wireless network connection mechanism comprises a capability to make a wireless connection to a third personal computer through only one wireless link, such that the third personal computer has a wireless connection to the second personal computer through the personal computer.

217. (Currently Amended) The personal computer of claim ~~213~~ 214, wherein the ~~wireless network connection mechanism, a flash memory component and a firewall hardware component are substantially located on the microchip~~ the internal firewall is configured to deny

access to at least the first microchip microprocessor of the personal computer by the other computers of the network during a shared operation involving the personal computer and at least one of the other computers of the network; and

wherein the shared operation comprises shared file resources and/or message passing.

218. (Currently Amended) A personal computer, comprising:

a microchip, the microchip comprising:

at least two or four or 8 or 16 or 32 or 64 or 128 or 256 or 512 or 1024

microprocessors, exclusive of a digital signal processor (DSP),

a non-volatile memory component, and

a power management component[;], and

at least one internal firewall, the internal firewall being a hardware firewall capable of allowing and/or denying access to portions of the microchip both to at least one user of the personal computer and to at least one user of the microchip from the network during shared use of the microchip; and

a wireless network connection mechanism configured to connect the personal computer to the network, the network comprising:

an the Internet.

219. (Currently Amended) The personal computer of claim 218, wherein ~~the microchip comprises an encryption component~~ the internal firewall is configured to deny access to at least a first microchip microprocessor of the personal computer by at least one other computer during a

shared operation involving the personal computer and the at least one other computer of the network, and

the internal firewall is further configured to allow access to at least a second microchip microprocessor of the at least one personal computer by at least one of the other computers of the network during the shared operation;

wherein the shared use includes unauthorized shared use, such as intrusion by hackers from outside the personal computer.

220. (Currently Amended) The personal computer of claim ~~218~~ 219, wherein the ~~wireless network connection mechanism, and a firewall hardware component are substantially located on the microchip~~ the internal firewall is configured to deny access to at least the first microchip microprocessor of the personal computer by the other computers of the network during a shared operation involving the personal computer and at least one of the other computers of the network; and

wherein the shared operation comprises shared file resources and/or message passing.

221. (Currently Amended) A personal computer, comprising:

a microchip, the microchip comprising:

~~at least two or four or 8 or 16 or 32 or 64 or 128 or 256 or 512 or 1024~~

microprocessors, exclusive of a digital signal processor (DSP),

a digital signal processor (DSP)[;], and

a power management component[;], and

at least one internal firewall.

the internal firewall being a hardware firewall capable of allowing and/or denying access to portions of the microchip both to at least one user of the personal computer and to at least one user of the microchip from the network during shared use of the microchip; and

a wireless network connection mechanism configured to connect the personal computer to the network, the network comprising:

~~an~~ the Internet; and

a the World Wide Web.

222. (Currently Amended) The personal computer of claim 221, wherein ~~the microchip comprises an encryption component~~ the internal firewall is configured to deny access to at least a first microchip microprocessor of the personal computer by at least one other computer during a shared operation involving the personal computer and the at least one other computer of the network, and

the internal firewall is further configured to allow access to at least a second microchip microprocessor of the at least one personal computer by at least one of the other computers of the network during the shared operation;

wherein the shared use includes unauthorized shared use, such as intrusion by hackers from outside the personal computer.

223. (Currently Amended) The personal computer of claim ~~221~~ 222, wherein ~~the wireless network connection mechanism, a non-volatile memory component and a firewall hardware component are substantially located on the microchip~~ the internal firewall is configured

to deny access to at least the first microchip microprocessor of the personal computer by the other computers of the network during a shared operation involving the personal computer and at least one of the other computers of the network; and

wherein the shared operation comprises shared file resources and/or message passing.

224. (Currently Amended) A personal computer, comprising:

a microchip, the microchip comprising:

~~at least two or four or 8 or 16 or 32 or 64 or 128 or 256 or 512 or 1024~~

microprocessors, exclusive of a digital signal processor (DSP),

a digital signal processor (DSP); and,

a power management component[;], and

at least one internal firewall,

the internal firewall being a hardware firewall capable of allowing and/or denying access to portions of the microchip both to at least one user of the personal computer and to at least one user of the microchip from the network during shared use of the microchip; and

a wireless network connection mechanism configured to connect the personal computer to the network, the network comprising:

an the Internet.

225. (Currently Amended) The personal computer of claim 224, wherein ~~the microchip comprises an encryption component~~ the internal firewall is configured to deny access to at least a first microchip microprocessor of the personal computer by at least one other computer during a

shared operation involving the personal computer and the at least one other computer of the network, and

the internal firewall is further configured to allow access to at least a second microchip microprocessor of the at least one personal computer by at least one of the other computers of the network during the shared operation;

wherein the shared use includes unauthorized shared use, such as intrusion by hackers from outside the personal computer.

226. (Currently Amended) The personal computer of claim-224 225, wherein the ~~wireless network connection mechanism, a non-volatile memory component and a firewall hardware component are substantially located on the microchip~~ the internal firewall is configured to deny access to at least the first microchip microprocessor of the personal computer by the other computers of the network during a shared operation involving the personal computer and at least one of the other computers of the network; and

wherein the shared operation comprises shared file resources and/or message passing.

227. (Currently Amended) A personal computer, comprising:

a microchip, the microchip comprising:

~~at least two or four or 8 or 16 or 32 or 64 or 128 or 256 or 512 or 1024~~

microprocessors, exclusive of a digital signal processor (DSP),

an application-specific integrated circuit (ASIC), and

a power management component[;], and

at least one internal firewall.

the internal firewall being a hardware firewall capable of allowing and/or denying access to portions of the microchip both to at least one user of the personal computer and to at least one user of the microchip from the network during shared use of the microchip; and

a wireless network connection mechanism configured to connect the personal computer to the network, the network comprising:

~~an~~ the Internet.

228. (Currently Amended) The personal computer of claim 227, wherein ~~the microchip comprises an encryption component~~ the internal firewall is configured to deny access to at least a first microchip microprocessor of the personal computer by at least one other computer during a shared operation involving the personal computer and the at least one other computer of the network, and

the internal firewall is further configured to allow access to at least a second microchip microprocessor of the at least one personal computer by at least one of the other computers of the network during the shared operation;

wherein the shared use includes unauthorized shared use, such as intrusion by hackers from outside the personal computer.

229. (Currently Amended) The personal computer of claim ~~227~~ 228, wherein ~~the wireless network connection mechanism, a non-volatile memory component and a firewall hardware component are substantially located on the microchip~~ the internal firewall is configured to deny access to at least the first microchip microprocessor of the personal computer by the

other computers of the network during a shared operation involving the personal computer and at least one of the other computers of the network; and

wherein the shared operation comprises shared file resources and/or message passing.

230. (Previously Presented) The personal computer of claim 130, wherein the wireless network connection mechanism is configured to process a wireless signal that comprises multiplexing.

231. (Previously Presented) The personal computer of claim 130, wherein the wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM).

232. (Currently Amended) The personal computer of claim ~~198~~ 199, wherein ~~the wireless network connection mechanism is configured to process a wireless signal that comprises multiplexing~~ the internal firewall is configured to allow access to at least the second microchip microprocessor of the personal computer by the other computers of the network during the shared operation.

233. (Currently Amended) The personal computer of claim ~~198~~ 232, wherein ~~the wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM)~~ the internal firewall is configured to deny access to at least the second microchip microprocessor of the personal computer by at least one user of the personal computer during the shared operation.

234. (Currently Amended) The personal computer of claim ~~201~~ 202, wherein the ~~wireless network connection mechanism is configured to process a wireless signal that comprises multiplexing~~ the internal firewall is configured to allow access to at least the second microchip microprocessor of the personal computer by the other computers of the network during the shared operation.

235. (Currently Amended) The personal computer of claim ~~201~~ 234, wherein the ~~wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM)~~ the internal firewall is configured to deny access to at least the second microchip microprocessor of the personal computer by at least one user of the personal computer during the shared operation.

236. (Currently Amended) The personal computer of claim ~~204~~ 205, wherein the ~~wireless network connection mechanism is configured to process a wireless signal that comprises multiplexing~~ the internal firewall is configured to allow access to at least the second microchip microprocessor of the personal computer by the other computers of the network during the shared operation.

237. (Currently Amended) The personal computer of claim ~~204~~ 236, wherein the ~~wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM)~~ the internal firewall is configured to deny access to at least the

second microchip microprocessor of the personal computer by at least one user of the personal computer during the shared operation.

238. (Currently Amended) The personal computer of claim ~~207~~ 208, wherein the ~~wireless network connection mechanism is configured to process a wireless signal that comprises multiplexing~~ the internal firewall is configured to allow access to at least the second microchip microprocessor of the personal computer by the other computers of the network during the shared operation.

239. (Currently Amended) The personal computer of claim ~~207~~ 238, wherein the ~~wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM)~~ the internal firewall is configured to deny access to at least the second microchip microprocessor of the personal computer by at least one user of the personal computer during the shared operation.

240. (Currently Amended) The personal computer of claim ~~210~~ 211, wherein the ~~wireless network connection mechanism is configured to process a wireless signal that comprises multiplexing~~ the internal firewall is configured to allow access to at least the second microchip microprocessor of the personal computer by the other computers of the network during the shared operation.

241. (Currently Amended) The personal computer of claim ~~210~~ 240, wherein the ~~wireless network connection mechanism is configured to process a wireless signal that is wave~~

~~division multiplexed (WDM)~~ the internal firewall is configured to deny access to at least the second microchip microprocessor of the personal computer by at least one user of the personal computer during the shared operation.

242. (Currently Amended) The personal computer of claim ~~213~~ 214, wherein the ~~wireless network connection mechanism is configured to process a wireless signal that comprises multiplexing~~ the internal firewall is configured to allow access to at least the second microchip microprocessor of the personal computer by the other computers of the network during the shared operation.

243. (Currently Amended) The personal computer of claim ~~213~~ 242, wherein the ~~wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM)~~ the internal firewall is configured to deny access to at least the second microchip microprocessor of the personal computer by at least one user of the personal computer during the shared operation.

244. (Currently Amended) The personal computer of claim ~~218~~ 219, wherein the ~~wireless network connection mechanism is configured to process a wireless signal that comprises multiplexing~~ the internal firewall is configured to allow access to at least the second microchip microprocessor of the personal computer by the other computers of the network during the shared operation.

245. (Currently Amended) The personal computer of claim ~~218~~ 244, wherein the ~~wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM)~~ the internal firewall is configured to deny access to at least the second microchip microprocessor of the personal computer by at least one user of the personal computer during the shared operation.

246. (Currently Amended) The personal computer of claim ~~224~~ 225, wherein the ~~wireless network connection mechanism is configured to process a wireless signal that comprises multiplexing~~ the internal firewall is configured to allow access to at least the second microchip microprocessor of the personal computer by the other computers of the network during the shared operation.

247. (Currently Amended) The personal computer of claim ~~224~~ 246, wherein the ~~wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM)~~ the internal firewall is configured to deny access to at least the second microchip microprocessor of the personal computer by at least one user of the personal computer during the shared operation.

248. (Currently Amended) The personal computer of claim ~~227~~ 228, wherein the ~~wireless network connection mechanism is configured to process a wireless signal that comprises multiplexing~~ the internal firewall is configured to allow access to at least the second microchip microprocessor of the personal computer by the other computers of the network during the shared operation :

249. (Currently Amended) The personal computer of claim ~~227~~ 248, wherein the ~~wireless network connection mechanism is configured to process a wireless signal that is wave division multiplexed (WDM)~~ the internal firewall is configured to deny access to at least the second microchip microprocessor of the personal computer by at least one user of the personal computer during the shared operation.

250. (New) The personal computer of Claim 198, wherein said microchip comprises at least 64 microprocessors.

251. (New) The personal computer of Claim 198, wherein said microchip comprises at least 1024 microprocessors.

252. (New) The personal computer of Claim 201, wherein said microchip comprises at least 64 microprocessors.

253. (New) The personal computer of Claim 201, wherein said microchip comprises at least 1024 microprocessors.

254. (New) The personal computer of Claim 204, wherein said microchip comprises at least 64 microprocessors.

255. (New) The personal computer of Claim 204, wherein said microchip comprises at least 1024 microprocessors.

256. (New) The personal computer of Claim 207, wherein said microchip comprises at least 64 microprocessors.

257. (New) The personal computer of Claim 207, wherein said microchip comprises at least 1024 microprocessors.

258. (New) The personal computer of Claim 210, wherein said microchip comprises at least 64 microprocessors.

259. (New) The personal computer of Claim 210, wherein said microchip comprises at least 1024 microprocessors.

260. (New) The personal computer of Claim 213, wherein said microchip comprises at least 64 microprocessors.

261. (New) The personal computer of Claim 213, wherein said microchip comprises at least 1024 microprocessors.

262. (New) The personal computer of Claim 218, wherein said microchip comprises at least 64 microprocessors.

263. (New) The personal computer of Claim 218, wherein said microchip comprises at least 1024 microprocessors.

264. (New) The personal computer of Claim 221, wherein said microchip comprises at least 64 microprocessors.

265. (New) The personal computer of Claim 221, wherein said microchip comprises at least 1024 microprocessors.

266. (New) The personal computer of Claim 224, wherein said microchip comprises at least 64 microprocessors.

267. (New) The personal computer of Claim 224, wherein said microchip comprises at least 1024 microprocessors.

268. (New) The personal computer of Claim 227, wherein said microchip comprises at least 64 microprocessors.

269. (New) The personal computer of Claim 227, wherein said microchip comprises at least 1024 microprocessors.